sema, lung cysts, unexplained hemoptosis, bronchial obstruction resulting from tumors and in the preoperative and postoperative evaluation of patients undergoing thoracic surgical operation.

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Intravenous Pyelography in Azotemia

Renal failure, in the absence of concurrent liver disease, is not a contraindication to excretory urography. Although the detail of renal structures obtained may be poor, the information gained can be vital, particularly the exclusion of remediable obstructive uropathy as the cause of the kidney failure. Standard volumes of any of the readily available intravenous urographic contrast media can be used, but larger volumes are recommended. Such high volume studies, particularly in combination with kidney tomograms and delayed x-ray films of the abdomen, can result in unexpectedly good demonstration of renal structures, even in some severely azotemic patients.

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Translumbar Pyelography in Children

When excretory urography fails to delineate the cause of unilateral obstructive uropathy and when retrograde pyelography is impossible, percutaneous translumbar pyelography may yield vital information. This procedure, utilized in 139 patients over the past 15 years, was reported from Stockholm in 1965.

Under television-monitored, image-intensification fluoroscopy, the dilated renal pelvis is punctured with a 20-gauge lumbar puncture needle. A urine specimen may be aspirated through this needle for bacteriologic and cytologic studies, and then water-soluble contrast media is injected.

Recently, Lalli applied this method in four children who had congenitally obstructed ureters. There was no complication in this pediatric series and the study clearly delineated the nature of the obstruction.

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Lalli AF: Translumbar pyelography in the child. Pediatrics 44: 1016-1018, 1969

The Osteochondroses

It is now commonly accepted that most if not all of what has been termed osteochondrosis or osteochondritis dissecans is the result of trauma. Frequently the inciting incident will not be recalled by the patient and development of symptoms may be long delayed. Minor repeated traumatic events may provide a fitting cause for most of these lesions, but several features seen occasionally are still unexplained. These include bilaterally symmetric lesions, such as are sometimes seen in osteochondritis dissecans, familial occurrence, and multiple areas of involvement in a single patient. It is possible that certain persons have an altered response to minor osteocartilaginous trauma. At present it seems more appropriate to denote these conditions as transchondral fractures rather than infer a factor of avascular necrosis.

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Growth Lines

Transverse lines in the metaphyses of the long bones have been termed "growth lines" but are more accurately denoted "post-growth arrest lines." Simple slowing or cessation of growth will not produce these bone strata, as they are formed only after recovery from illness when a spurt of growth is instituted. If growth is not resumed, a lucent line will be seen just beneath the cortex instead. This lucency was formerly thought to be